

# Matthew Sullivan

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github.com/mattsul

mattsul.github.io

## SUMMARY OF QUALIFICATIONS

- Self-starter strong in electronic project development and documentation
- Experienced in technical documentation, PCB design, circuit design, and prototype analysis
- Demonstrated performance as a team player and independent worker with analytical skills
- Hands-on experience in PSPICE, Python, Java, MATLAB, JavaScript, Eagle CAD, and Verilog
- Proven flexible problem solver with strong written and verbal communication skills

## EDUCATION

**University of Washington**, Seattle, WA

*Bachelor of Science in Electrical and Computer Engineering*

Graduated June 2021

Department GPA: 3.60

## WORK & LEADERSHIP EXPERIENCE

**Engineering Design Instructor**, University of Washington

Apr 2021 – Jun 2021

- Taught 20 freshmen engineering design, schematic design, Arduino, and computer aided design
- Organized, managed, and supported technical issues in all project phases including designing, developing, and testing
- Implemented effective communication methodologies, maintained documentation, and prepared reports for management

**Front End Web Developer**, Department Capstone

Jan 2021 – Jun 2021

- Created and released a scalable open-source web application to provide prognostics data sets
- Conducted tests and improved website design for responsiveness, clarity, and effectiveness
- Led discussion, organized, collected, and implemented weekly performance feedback from stakeholders to improve product

**Lead Research Engineer**, University of Washington

Jul 2020 – Apr 2021

- Led research and developed of an acoustic assessor for a new online hearing test while resolving research challenges
- Collected, analyzed, and evaluated audio data, revealing 87% accuracy of the true noise floor
- Documented recurring research problems, wrote software design guidelines and instruction manuals on application usage

**Research Assistant**, University of Washington

Dec 2017 – Jul 2018

- Collaborated with the team in developing confidential sensor while resolving research challenges
- Created documentation including bill of materials, material definition, dimensions, tolerances, and technical drawings
- Used MATLAB to analyze data that facilitated to minimize 83% of previous noise
- Identified technical issues and designed, etched, soldered, and printed circuit boards to minimize 8% of total noise
- Composed instruction manuals on data collections, data analysis, and prototype processes

## PROJECTS

**PCB Design**

Sept 2021 - Present

- Designed and simulated 3 channel audio mixer and business card schematics in PSPICE
- Developed PCB in Eagle CAD
- Currently printing PCBs and programming TI MSP430 microcontroller